



April 27, 2012

Mr. Nathan Dadap  
United States Environmental Protection Agency Region IX  
RCRA Facilities Management (WST-4)  
75 Hawthorne Street  
San Francisco, California 94105

**Re: Amendment #8 to the November 18, 2011 Application and Soil Management Plan  
Soil Management During Excavation and Equipment Decontamination, April 2012  
Birch Hills Golf Course  
2250 East Birch Street, Brea, California**

Dear Mr. Dadap:

On behalf of Chevron Land and Development Company (Chevron), URS Corporation (URS) is submitting Amendment #8 to the November 18, 2011 Application and Soil Management Plan (SMP) for the polychlorinated biphenyls (PCBs) detected on the Birch Hills Golf Course located in Brea, California (Site – Figures 1 and 2). This amendment is being submitted to Region IX of the United States Environmental Protection Agency (EPA) in accordance with 40 Code of Federal Regulations (CFR) Part 761.61(c) and to the Orange County Health Care Agency, which provides oversight for remedial activities at the Golf Course.

Amendment #8 replaces Section 3.4, “Soil Management During Excavation” and Section 3.8, “Equipment Decontamination”, which described the soil handling procedures for PCB-impacted soil. This letter provides updated procedures based on discussions with EPA and OCHCA since the SMP was submitted. This letter is being submitted to EPA and OCHCA for design review and approval.

### **3.4 Soil Management During Excavation**

Soil management during excavation will follow a multi-stage process as noted below:

- The first stage of the excavation process will include cutting down the trees and brush within each excavation area. The foliage will be recycled as the arsenic is not preferentially adsorbed by most root systems (Gonzaga, 2006 in the SMP) and hydrophobic PCBs such as Aroclor 1254 or Aroclor 1260 will be absorbed to the roots, but will not translocate into the trunk (Liu, 2008 in the SMP). The root balls will be removed and placed in a bin with the impacted soil for off-site disposal, as these materials will have the greatest potential to have roots mixed with impacted soil. Mature trees along the western property boundary that separate the golf course from the off-site residences will be left in place to the extent practicable;
- The second stage will involve removing soil within the excavation area. Smaller excavations such as those planned for the PCBs in the southwest or the deeper portions of Planning Area 12B will be conducted using a backhoe, excavator or similar equipment and placing the soil directly into lined roll-off bins or soil transport trucks. PCB-impacted soil with concentrations greater than 25 milligrams per kilogram (mg/kg) will be sent off-site for disposal. PCB-impacted soil

with concentrations less than 25 mg/kg will be consolidated in the northern consolidation area. Larger excavations such as those planned for Planning Area 12B will be conducted with graders/scrapers, which will take the soil directly to the northern consolidation area. In addition:

- Approximate excavation dimensions for the identified areas with PCB concentrations at or above 10 mg/kg (estimated value needed to achieve a statistically based concentration meeting the commercial worker RSL of 0.74 mg/kg) are provided in Table 1. Initial excavation depths will be at least 1-foot below the sample depth where soil concentrations greater than 10 mg/kg were detected. The maximum excavation depths will generally be set at 10-feet of final grade as this is the appropriate depth limit for a direct exposure pathway with specific location adjustments as needed to address areas with PCB mass that are above 10 mg/kg;
- Sod outside the immediate excavation area will be left in place to give the equipment a clean working surface for the bulk of the excavation work. Similar to the tree roots, any removed sod will be placed in a bin for off-site disposal or consolidated where practical as the roots will have the greatest potential to be mixed with impacted soil;
- If stockpiles are necessary due to project timing or other factors, the stockpiles will be placed on plastic sheeting during active excavation and then covered by plastic sheeting until the soil can be removed from the Site;
- For worker safety, excavation sidewalls will be sloped at a minimum 1:1 ratio with depth as needed. Shoring use is not anticipated, but will be evaluated as work proceeds;
- To the extent possible, soil excavation and transport equipment will be kept out of the open excavations, so that the wheels and surfaces will not be in contact with the impacted soil. For larger excavations or when access to the excavation is required, then the equipment will be sent through a decontamination process (see Section 3.8 below) before the equipment is allowed into a non-impacted portion of the golf course;
- The grading contractor will designate haul routes from the large excavations in Planning Area 12B to the northern consolidation area. These haul routes will be constructed with an approximately 6-inch layer of clean fill that will serve as a separation between the equipment and the native clean soil. This clean, separation soil layer will be removed as the last part of the consolidation process and placed in the consolidation area as a protective measure to keep PCB-impacted soil that might be on the equipment wheels or surfaces from reaching the native northern soil;
- Transport trucks with PCB-impacted soil designated for off-site disposal will follow a separate haul route across the southern boundary of Planning Area 12B to a construction gate with access to Kraemer Avenue. Similar haul route construction as noted above will be used for portions of the route that go through areas with exposed soil that might potentially have PCB-impacts.

- Once the initial excavation is completed, the third stage will include collecting interim soil samples for submittal to an off-site laboratory for chemical analysis as noted in Section 3.5 of the SMP. Once the excavation is complete, four sidewall and five base/floor soil confirmation samples will be collected and analyzed for PCBs by EPA Method 8082. If the soil data indicate that additional soil excavation is necessary to achieve the statistically based soil screening criteria, the excavation boundaries will be expanded a minimum of 10-feet laterally and 1-foot vertically around the sample location with the elevated concentrations to remove additional soil. Additional interim/potential final confirmation samples will then be collected from the excavation base/floor and the mid-point on the sidewalls, adjusted as needed to reflect the locations/depths of original samples with concentrations above the statistically based screening criteria. Once the sample results show the excavation is complete, agency approval will be obtained to backfill the excavation (Section 3.7 of the SMP).

### **3.8 Equipment Decontamination**

The following paragraphs describe an alternate decontamination procedure under 40 CFR Part 761.79(h) that is recommended for use at the Site. This alternate procedure is being recommended due to 1) the low level of PCB concentrations detected on the golf course (i.e., average of less than 5 mg/kg); 2) the PCB distribution process which resulted in PCBs being intermixed with site soil (i.e., PCBs will be present in soil rather than a separate mixture, which will be easier to remove from the equipment); 3) the complexity of trying to decontaminate large earth moving equipment with the general 40 CFR 761.79 solvent decontamination procedure; and 4) to minimize solvent emissions to the air or solvent releases to the ground that could occur given the large solvent use that would be necessary to decontaminate the large earth moving equipment.

A demonstration test of the effectiveness of this alternate decontamination method was conducted from March 28 to 29, 2012 during soil sampling around GS-60 and GS-61 (Figure 2), an on-site area where PCB-impacted soil is consistently detected at concentrations up to 116 mg/kg. The test involved using the alternate decontamination procedures (see below) to clean the slide hammer and hand auger, then an equipment blank was collected by pouring deionized water over the cleaned surface and catching the liquid in a sample vial. Then a solvent (hexane) impregnated, gauze pad was used to wipe down an approximate 10 centimeter (cm) by 10 cm area on the decontaminated equipment and the pad was placed in a sample vial. Both the equipment blank and gauze pad were analyzed for PCBs using EPA Method 8082. The following table summarizes the results from the demonstration test that show that even in areas with elevated PCB concentrations in soil, the proposed decontamination procedure met the project goal of achieving concentrations less than 10 micrograms per square centimeter ( $\mu\text{g}/100 \text{ cm}^2$ ). Laboratory analytical reports with these data are attached.

Equipment Decontamination Demonstration Equipment Blank and Wipe Samples					
Birch Hills Golf Course					
Brea, California					
April 2012					
Sample Number	Sample Type	Depth (feet bgs)	Sample Date	PCBs Aroclor-1254	PCBs Aroclor-1260
Samples collected from South portion of the Site (GS-60, GS-61, GS-71B) on March 28, 2012 with a maximum PCB detection of 21.2 mg/kg					
EB-032812-1	Equipment Blank	NA	03/28/12	<0.485 ug/L	<0.485 ug/L
EB-032812-2	Equipment Blank	NA	03/28/12	<0.485 ug/L	<0.485 ug/L
EB-032812-3	Equipment Blank	NA	03/28/12	<0.485 ug/L	<0.485 ug/L
EB-032812-4	Equipment Blank	NA	03/28/12	<0.481 ug/L	<0.481 ug/L
EBWIPE-032812-1	Hexane Wipe Sample	NA	03/28/12	<0.500 ug/100 cm <sup>2</sup>	<0.500 ug/100 cm <sup>2</sup>
EBWIPE-032812-2	Hexane Wipe Sample	NA	03/28/12	<0.500 ug/100 cm <sup>2</sup>	<0.500 ug/100 cm <sup>2</sup>
EBWIPE-032812-3	Hexane Wipe Sample	NA	03/28/12	<0.500 ug/100 cm <sup>2</sup>	<0.500 ug/100 cm <sup>2</sup>
EBWIPE-032812-4	Hexane Wipe Sample	NA	03/28/12	<0.500 ug/100 cm <sup>2</sup>	<0.500 ug/100 cm <sup>2</sup>
Samples collected from South portion of the Site (GS-60, GS-61, GS-71B) on March 29, 2012 with a maximum PCB detection of 23.6 mg/kg					
EB-032912-1	Equipment Blank	NA	03/29/12	<0.476 ug/L	<0.476 ug/L
EBWIPE-032912-1	Hexane Wipe Sample	NA	03/29/12	<0.500 ug/100 cm <sup>2</sup>	<0.500 ug/100 cm <sup>2</sup>
EB-032912-2	Equipment Blank	NA	03/29/12	<0.476 ug/L	<0.476 ug/L
EBWIPE-032912-2	Hexane Wipe Sample	NA	03/29/12	<0.500 ug/100 cm <sup>2</sup>	<0.500 ug/100 cm <sup>2</sup>
<b>Notes:</b>					
<= Not detected above laboratory reporting limit.					
ug/100 cm <sup>2</sup> = micrograms per 100 square centimeters					
ug/l = micrograms per liter					
Polychlorinated Biphenyls (PCBs) analyzed by EPA Method 8082. Data reported in attached laboratory reports.					

### Alternate Procedures

Hand tools and soil sampling equipment will be decontaminated using a three-stage decontamination (wash with detergent [i.e., Alconox] and double rinse with distilled water) between each sample location. Tools and equipment will then be allowed to air dry.

Heavy equipment (i.e., scrapper blades, excavator/backhoe buckets, tires, tracks, etc.) will be decontaminated in a plastic lined decontamination area following the completion of field activities by a dry decontamination using scraping tools, brushes and wipes followed by a water rinse. A pressure washer will be used for a final rinse over areas that have been in contact with impacted soils. Rinsate water will be collected and placed in 55-gallon Department of Transportation (DOT) drums and sampled and disposed in accordance with the procedures in Section 3.9 of the SMP.

Additional decontamination confirmation sampling will be conducted by collecting a 40 CFR Part 761.79 wipe sample along with every second equipment blank sample collected or a minimum of once per excavation decontamination event. The confirmation process will include sampling the decontaminated equipment by 1) pouring distilled water over the cleaned surface and collecting the water for PCB analysis by

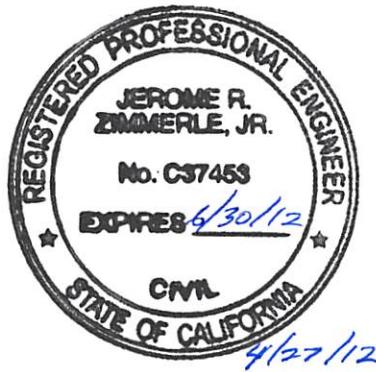
EPA Method 8082; and 2) by wiping the surface of the sampling equipment, excavator or backhoe bucket with a solvent impregnated, 10 centimeter (cm) by 10 cm wipe pad in accordance with the decontamination wipe sampling procedures in 40 CFR Part 761.79. The wipe sample will be analyzed for PCBs using EPA Method 8082 and the results will be compared to the project goal of achieving concentrations less than 10 µg/100 cm<sup>2</sup>.

If you have any questions/comments please feel free to contact Jim Martinez at (714) 319-2257 or Jerome Zimmerle at (714) 433-7738.

Sincerely,  
**URS Corporation**



Jerome R. Zimmerle Jr., PE  
Principal Engineer  
California Professional Engineer No. C37453



cc:

Jim Martinez (Chevron)  
Trevor Black (Chevron)  
Carmen Santos (EPA)

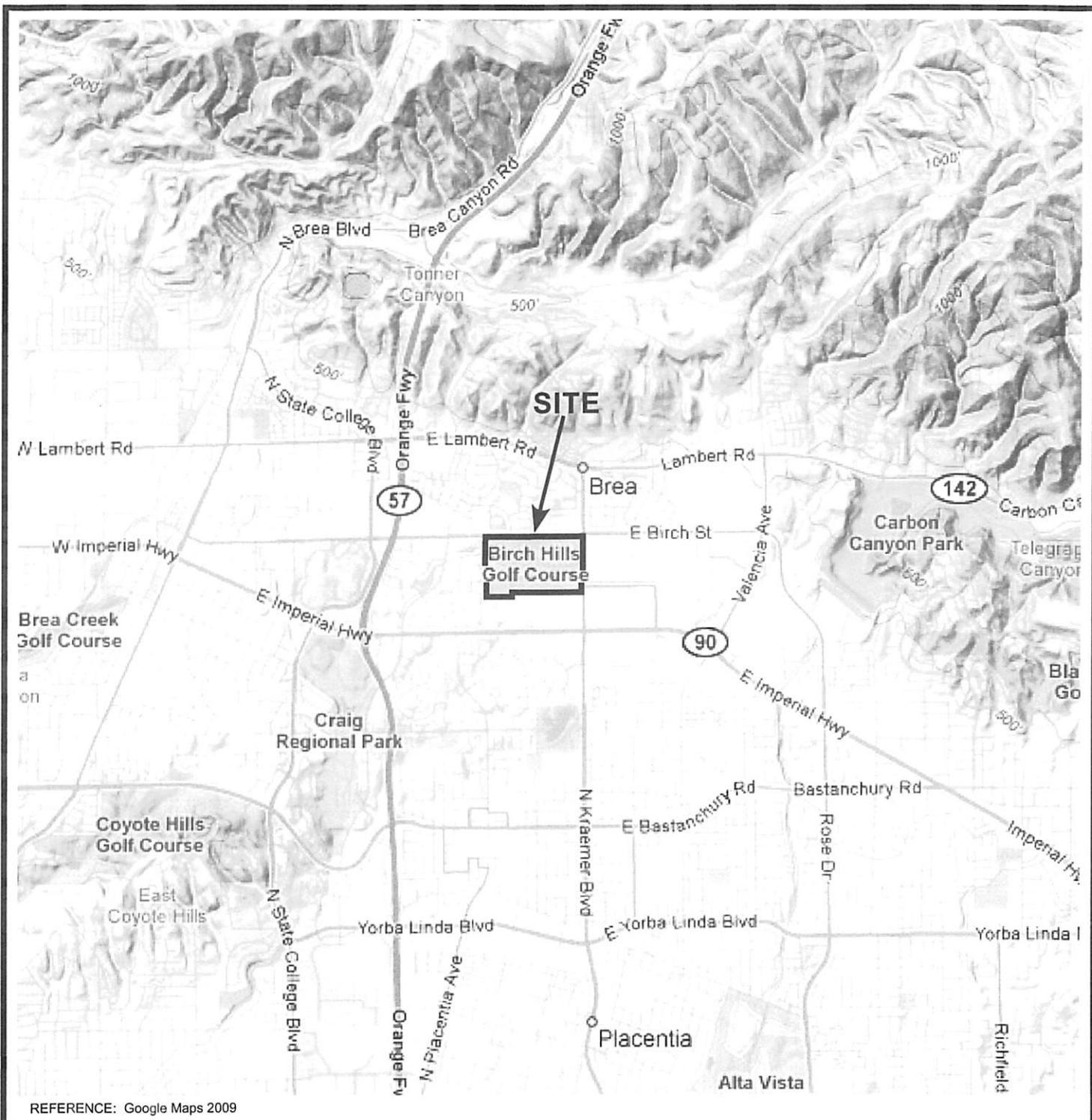
Garrick Jauregui (Chevron)  
Steve Speer (OCHCA)

## **TABLE**

**Table 1**  
**Approximate Excavation Dimensions**  
**Birch Hills Golf Course**  
**Brea, California**  
**April 2012**

Excavation Location	Maximum Detected PCBs Aroclor-1254 (mg/kg)	Maximum Detected PCBs Aroclor-1260 (mg/kg)	Soil Sent To	Length at Base (feet)	Width at Base (feet)	Depth of Base (feet bgs)	Notes
B-12	370	44	Off-site Hazardous	30	30	7	
C-13	170	23	Off-site Hazardous	30	30	3	
GS-60I	116	ND<4.01	Off-site Hazardous	20	20	3	
GS-27F	89.5	ND<3.59	Off-site Hazardous	20	20	2	
GS-144	54	ND<5	Off-site Hazardous	30	30	2	
B-12	10's	1's	Off-site Non-Hazardous	80	80	6	Assume soil surrounding haz level soil in this location also requires excavation
C-13	10's	1's	Off-site Non-Hazardous	80	80	3	Assume soil surrounding haz level soil in this location also requires excavation
D-10	39	6.4	Off-site Non-Hazardous	40	40	2	
E-15	24.2	ND<1.78	Off-site Non-Hazardous	40	40	3	
GS-125C	29.5	ND<1.83	Off-site Non-Hazardous	30	30	12	Coordinate with GS-60 and GS-61 excavations
GS-27	23.6	ND<1.79	Consolidation	40	40	5	Mass detected at 20-ft step-outs
GS-60	19	ND<5	Consolidation	150	100	7	Sample points on a slope, so depth to base refers to northern portion of excavation
GS-61	23	ND<5	Consolidation	150	100	12	Sample points on a slope, so depth to base refers to northern portion of excavation
GS-71B	21.2	ND<1.79	Consolidation	40	40	3	Mass detected at 10-ft step-outs
GS-129B	20.1	ND<1.9	Consolidation	30	30	2	
GS-145	11	ND<5	Consolidation	30	30	2	
B-13	11	2.3	Consolidation	100	100	2	Coordinate with B-12 and C-13 excavations

## **FIGURES**



Approximate Scale

0.0      0.5      1.0 miles

## SITE VICINITY MAP

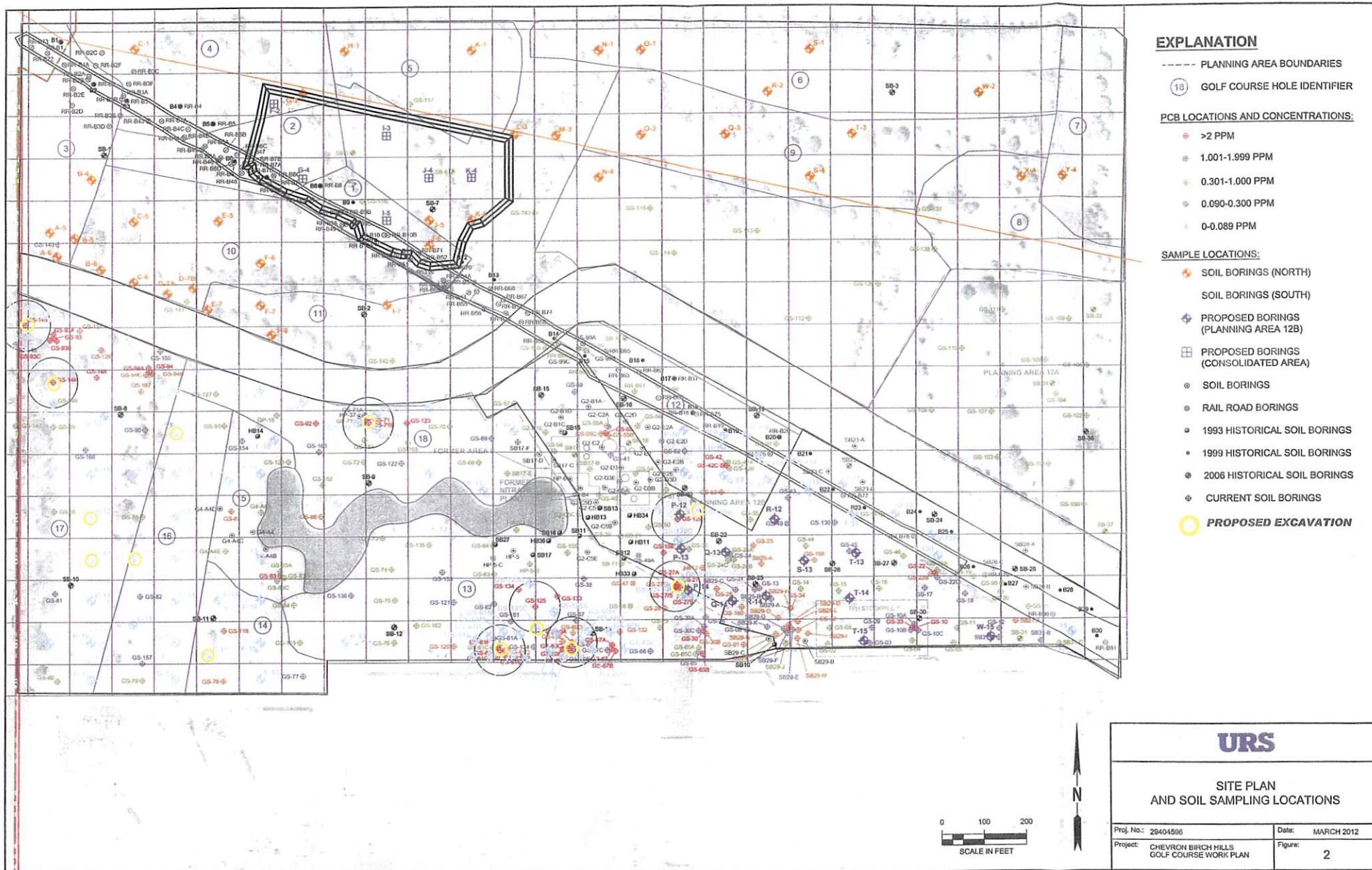
**FIGURE 1**

**Birch Hills Golf Course**  
2250 East Birch Street  
Brea, California

URS Job No: 29404241.10000

**URS**





**URS**

**SITE PLAN  
AND SOIL SAMPLING LOCATIONS**

Proj. No.:	29404596	Date:	MARCH 2012
Project:	CHEVRON BIRCH HILLS GOLF COURSE WORK PLAN	Figure:	2

## **LABORATORY ANALYTICAL DATA**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-6894-1

Client Project/Site: Chevron Brea/Birch Hills Site - Soils

For:

URS Corporation

2020 East First Street, Suite 400

Santa Ana, California 92705

Attn: Jerry Zimmerle



Authorized for release by:

4/6/2012 10:42:52 AM

Sushmitha Reddy

Project Manager I

sushmitha.reddy@testamericainc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

## Table of Contents

Cover Page .....	1
Table of Contents .....	2
Sample Summary .....	3
Case Narrative .....	4
Client Sample Results .....	5
Chronicle .....	8
QC Sample Results .....	10
QC Association .....	12
Definitions .....	13
Certification Summary .....	14
Chain of Custody .....	16
Receipt Checklists .....	17

## Sample Summary

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-6894-1	EB-032812-1	Water	03/28/12 12:45	03/28/12 19:10
440-6894-2	EB-032812-2	Water	03/28/12 12:45	03/28/12 19:10
440-6894-3	EBWIPE-032812-1	Wipe	03/28/12 12:50	03/28/12 19:10
440-6894-4	EBWIPE-032812-2	Wipe	03/28/12 12:50	03/28/12 19:10
440-6894-5	EB-032812-3	Water	03/28/12 15:15	03/28/12 19:10
440-6894-6	EB-032812-4	Water	03/28/12 15:20	03/28/12 19:10
440-6894-7	EBWIPE-032812-3	Wipe	03/28/12 15:25	03/28/12 19:10
440-6894-8	EBWIPE-032812-4	Wipe	03/28/12 15:30	03/28/12 19:10

## Case Narrative

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

---

**Job ID: 440-6894-1**

---

**Laboratory: TestAmerica Irvine**

---

**Narrative**

---

**Job Narrative  
440-6894-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**Subcontract non-Sister**

No analytical or quality issues were noted.

**Laboratory: TestAmerica Nashville**

---

**NELAC Certification**

---

NELAC certifications are not held for the following analytes included in this report:

<b>Method</b>	<b>Matrix</b>	<b>Analyte</b>
SW846 8082	Wipe	PCB-1262
		PCB-1268

# Client Sample Results

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

**Client Sample ID: EB-032812-1**

**Lab Sample ID: 440-6894-1**

Date Collected: 03/28/12 12:45

Matrix: Water

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
PCB-1221	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
PCB-1232	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
PCB-1242	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
PCB-1248	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
PCB-1254	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
PCB-1260	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:30	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	99			17 - 142			03/31/12 10:45	04/03/12 01:30	1.00
Decachlorobiphenyl	74			10 - 149			03/31/12 10:45	04/03/12 01:30	1.00

**Client Sample ID: EB-032812-2**

**Lab Sample ID: 440-6894-2**

Date Collected: 03/28/12 12:45

Matrix: Water

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
PCB-1221	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
PCB-1232	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
PCB-1242	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
PCB-1248	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
PCB-1254	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
PCB-1260	ND		0.485		ug/L		03/31/12 10:45	04/03/12 01:51	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	97			17 - 142			03/31/12 10:45	04/03/12 01:51	1.00
Decachlorobiphenyl	49			10 - 149			03/31/12 10:45	04/03/12 01:51	1.00

**Client Sample ID: EBWIPE-032812-1**

**Lab Sample ID: 440-6894-3**

Date Collected: 03/28/12 12:50

Matrix: Wipe

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:24	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	92			19 - 147			03/31/12 09:15	04/01/12 23:24	1.00
Decachlorobiphenyl	102			20 - 150			03/31/12 09:15	04/01/12 23:24	1.00

## Client Sample Results

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

**Client Sample ID: EBWIPE-032812-2**

**Lab Sample ID: 440-6894-4**

Date Collected: 03/28/12 12:50

Matrix: Wipe

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 23:43	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	92		19 - 147				03/31/12 09:15	04/01/12 23:43	1.00
Decachlorobiphenyl	94		20 - 150				03/31/12 09:15	04/01/12 23:43	1.00

**Client Sample ID: EB-032812-3**

**Lab Sample ID: 440-6894-5**

Date Collected: 03/28/12 15:15

Matrix: Water

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
PCB-1221	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
PCB-1232	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
PCB-1242	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
PCB-1248	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
PCB-1254	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
PCB-1260	ND		0.485		ug/L		03/31/12 10:45	04/03/12 02:56	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	101		17 - 142				03/31/12 10:45	04/03/12 02:56	1.00
Decachlorobiphenyl	88		10 - 149				03/31/12 10:45	04/03/12 02:56	1.00

**Client Sample ID: EB-032812-4**

**Lab Sample ID: 440-6894-6**

Date Collected: 03/28/12 15:20

Matrix: Water

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
PCB-1221	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
PCB-1232	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
PCB-1242	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
PCB-1248	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
PCB-1254	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
PCB-1260	ND		0.481		ug/L		03/31/12 10:45	04/03/12 03:18	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	89		17 - 142				03/31/12 10:45	04/03/12 03:18	1.00
Decachlorobiphenyl	70		10 - 149				03/31/12 10:45	04/03/12 03:18	1.00

# Client Sample Results

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

**Client Sample ID: EBWIPE-032812-3**

**Lab Sample ID: 440-6894-7**

Date Collected: 03/28/12 15:25

Matrix: Wipe

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:02	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	80		19 - 147				03/31/12 09:15	04/02/12 00:02	1.00
Decachlorobiphenyl	90		20 - 150				03/31/12 09:15	04/02/12 00:02	1.00

**Client Sample ID: EBWIPE-032812-4**

**Lab Sample ID: 440-6894-8**

Date Collected: 03/28/12 15:30

Matrix: Wipe

Date Received: 03/28/12 19:10

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:21	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	98		19 - 147				03/31/12 09:15	04/02/12 00:21	1.00
Decachlorobiphenyl	112		20 - 150				03/31/12 09:15	04/02/12 00:21	1.00

## Lab Chronicle

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

**Client Sample ID: EB-032812-1**

**Lab Sample ID: 440-6894-1**

Date Collected: 03/28/12 12:45

Matrix: Water

Date Received: 03/28/12 19:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3510C/3665A		0.971	1030 mL	5 mL	12C6745_P	03/31/12 10:45	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005320	04/03/12 01:30	WAM	TAL NSH

**Client Sample ID: EB-032812-2**

**Lab Sample ID: 440-6894-2**

Date Collected: 03/28/12 12:45

Matrix: Water

Date Received: 03/28/12 19:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3510C/3665A		0.971	1030 mL	5 mL	12C6745_P	03/31/12 10:45	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005320	04/03/12 01:51	WAM	TAL NSH

**Client Sample ID: EBWIPE-032812-1**

**Lab Sample ID: 440-6894-3**

Date Collected: 03/28/12 12:50

Matrix: Wipe

Date Received: 03/28/12 19:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005319	04/01/12 23:24	WAM	TAL NSH

**Client Sample ID: EBWIPE-032812-2**

**Lab Sample ID: 440-6894-4**

Date Collected: 03/28/12 12:50

Matrix: Wipe

Date Received: 03/28/12 19:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005319	04/01/12 23:43	WAM	TAL NSH

**Client Sample ID: EB-032812-3**

**Lab Sample ID: 440-6894-5**

Date Collected: 03/28/12 15:15

Matrix: Water

Date Received: 03/28/12 19:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3510C/3665A		0.971	1030 mL	5 mL	12C6745_P	03/31/12 10:45	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005320	04/03/12 02:56	WAM	TAL NSH

**Client Sample ID: EB-032812-4**

**Lab Sample ID: 440-6894-6**

Date Collected: 03/28/12 15:20

Matrix: Water

Date Received: 03/28/12 19:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3510C/3665A		0.962	1040 mL	5 mL	12C6745_P	03/31/12 10:45	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005320	04/03/12 03:18	WAM	TAL NSH

## Lab Chronicle

Client: URS Corporation  
Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

**Client Sample ID: EBWIPE-032812-3**

Date Collected: 03/28/12 15:25

Date Received: 03/28/12 19:10

**Lab Sample ID: 440-6894-7**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005319	04/02/12 00:02	WAM	TAL NSH

**Client Sample ID: EBWIPE-032812-4**

Date Collected: 03/28/12 15:30

Date Received: 03/28/12 19:10

**Lab Sample ID: 440-6894-8**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total	Analysis	SW846 8082		1.00			V005319	04/02/12 00:21	WAM	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

# QC Sample Results

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

## Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082

Lab Sample ID: 12C6743-BLK1							Client Sample ID: Method Blank			
							Prep Type: Total			
							Prep Batch: 12C6743_P			
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
PCB-1016	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
PCB-1221	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
PCB-1232	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
PCB-1242	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
PCB-1248	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
PCB-1254	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
PCB-1260	ND		0.500	ug/Wipe		03/31/12 09:15	04/01/12 20:35		1.00	
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Tetrachloro-meta-xylene	84		19 - 147				03/31/12 09:15	04/01/12 20:35		1.00
Decachlorobiphenyl	94		20 - 150				03/31/12 09:15	04/01/12 20:35		1.00

Lab Sample ID: 12C6743-BS1							Client Sample ID: Lab Control Sample			
							Prep Type: Total			
							Prep Batch: 12C6743_P			
Analyte	Blank Spike Added	Blank LCS Result	LCS Qualifier	Unit	D	%Rec.	Prepared	Analyzed	Dil Fac	
PCB-1254		5.00	5.67	MNR1	ug/Wipe	113	72 - 137			
Surrogate	Blank %Recovery	Blank Qualifier	Limits							
Tetrachloro-meta-xylene	90		19 - 147							
Decachlorobiphenyl	96		20 - 150							

Lab Sample ID: 12C6745-BLK1							Client Sample ID: Method Blank			
							Prep Type: Total			
							Prep Batch: 12C6745_P			
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
PCB-1016	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
PCB-1221	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
PCB-1232	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
PCB-1242	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
PCB-1248	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
PCB-1254	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
PCB-1260	ND		0.500	ug/L		03/31/12 10:45	04/02/12 22:37		1.00	
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Tetrachloro-meta-xylene	100		17 - 142				03/31/12 10:45	04/02/12 22:37		1.00
Decachlorobiphenyl	93		10 - 149				03/31/12 10:45	04/02/12 22:37		1.00

Lab Sample ID: 12C6745-BS1							Client Sample ID: Lab Control Sample			
							Prep Type: Total			
							Prep Batch: 12C6745_P			
Analyte	Blank Spike Added	Blank LCS Result	LCS Qualifier	Unit	D	%Rec.	Prepared	Analyzed	Dil Fac	
PCB-1254		5.00	5.25	MNR1	ug/L	105	11 - 150			

## QC Sample Results

Client: URS Corporation  
Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

### Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 12C6745-BS1

Matrix: Water

Analysis Batch: V005320

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12C6745\_P

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
Tetrachloro-meta-xylene			100		17 - 142
Decachlorobiphenyl			85		10 - 149

Lab Sample ID: 12C6745-BSD1

Matrix: Water

Analysis Batch: V005320

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 12C6745\_P

Analyte	Spike	LCS Dup	LCS Dup	%Rec.	RPD			
	Added	Result	Qualifier	Unit	Limit			
PCB-1254	5.00	5.22	MNR1	ug/L	104	11 - 150	0.7	50

Surrogate	LCS Dup	LCS Dup	%Recovery	Qualifier	Limits
Tetrachloro-meta-xylene			101		17 - 142
Decachlorobiphenyl			80		10 - 149

## QC Association Summary

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

### Pesticides

Analysis Batch: V005319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6743-BLK1	Method Blank	Total	Wipe	SW846 8082	12C6743_P
12C6743-BS1	Lab Control Sample	Total	Wipe	SW846 8082	12C6743_P
440-6894-3	EBWIPE-032812-1	Total	Wipe	SW846 8082	12C6743_P
440-6894-4	EBWIPE-032812-2	Total	Wipe	SW846 8082	12C6743_P
440-6894-7	EBWIPE-032812-3	Total	Wipe	SW846 8082	12C6743_P
440-6894-8	EBWIPE-032812-4	Total	Wipe	SW846 8082	12C6743_P

Analysis Batch: V005320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6745-BLK1	Method Blank	Total	Water	SW846 8082	12C6745_P
12C6745-BS1	Lab Control Sample	Total	Water	SW846 8082	12C6745_P
12C6745-BSD1	Lab Control Sample Dup	Total	Water	SW846 8082	12C6745_P
440-6894-1	EB-032812-1	Total	Water	SW846 8082	12C6745_P
440-6894-2	EB-032812-2	Total	Water	SW846 8082	12C6745_P
440-6894-5	EB-032812-3	Total	Water	SW846 8082	12C6745_P
440-6894-6	EB-032812-4	Total	Water	SW846 8082	12C6745_P

Prep Batch: 12C6743\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6743-BLK1	Method Blank	Total	Wipe	EPA 3550B	
12C6743-BS1	Lab Control Sample	Total	Wipe	EPA 3550B	
440-6894-3	EBWIPE-032812-1	Total	Wipe	EPA 3550B	
440-6894-4	EBWIPE-032812-2	Total	Wipe	EPA 3550B	
440-6894-7	EBWIPE-032812-3	Total	Wipe	EPA 3550B	
440-6894-8	EBWIPE-032812-4	Total	Wipe	EPA 3550B	

Prep Batch: 12C6745\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6745-BLK1	Method Blank	Total	Water	EPA 3510C/3665A	
12C6745-BS1	Lab Control Sample	Total	Water	EPA 3510C/3665A	
12C6745-BSD1	Lab Control Sample Dup	Total	Water	EPA 3510C/3665A	
440-6894-1	EB-032812-1	Total	Water	EPA 3510C/3665A	
440-6894-2	EB-032812-2	Total	Water	EPA 3510C/3665A	
440-6894-5	EB-032812-3	Total	Water	EPA 3510C/3665A	
440-6894-6	EB-032812-4	Total	Water	EPA 3510C/3665A	

## Definitions/Glossary

Client: URS Corporation  
Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

### Qualifiers

#### Pesticides

Qualifier	Qualifier Description
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Livine	Arizona	State Program	AZ0671	10256
TestAmerica Livine	California	LA City Sanitation Districts	9	1108CA
TestAmerica Livine	Guam	State Program	6	2706
TestAmerica Livine	California	State Program	6	Cert. No. 10.001r
TestAmerica Livine	Hawaii	State Program	6	N/A
TestAmerica Livine	Nevada	State Program	6	CA015312007A
TestAmerica Livine	New Mexico	State Program	6	N/A
TestAmerica Livine	Northem Mariana Islands	State Program	9	N/A
TestAmerica Livine	Oregon	NELAC	10	MP0002
TestAmerica Livine	USDA	Federal	4005	P330-09-00080
TestAmerica Nashville	ACIL	ACIL	393	0453-07
TestAmerica Nashville	AL2A	ISO/AEC 17025	4	41150
TestAmerica Nashville	Alabama	State Program	10	UST-087
TestAmerica Nashville	Alaska (UST)	State Program	9	88-0737
TestAmerica Nashville	Arkansas DEQ	State Program	9	AZ0473
TestAmerica Nashville	Arizona	NELAC	5	200010
TestAmerica Nashville	Illinois	NELAC	4	887358
TestAmerica Nashville	Florida	NELAC	1	PH-0220
TestAmerica Nashville	Kansas	State Program	7	131
TestAmerica Nashville	Iowa	NELAC	7	200010
TestAmerica Nashville	Michigan	NELAC	5	487358
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana (UST)	State Program	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina DENR	State Program	4	387
TestAmerica Nashville	North Dakota	NELAC	4	R-146
TestAmerica Nashville	Ohio VAP	State Program	8	84009
TestAmerica Nashville	Oklahoma	State Program	5	CL0033
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LA000268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	S-48469
TestAmerica Nashville	USDA	Federal	8	1104704077-09-TX
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	00323
TestAmerica Nashville	West Virginia	State Program	10	C-69
TestAmerica Nashville	Wisconsin	State Program	5	998020430

## Certification Summary

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6894-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	Wyoming (UST)	A2LA	8	453.07

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



## **CHAIN OF CUSTODY FORM**

17481 Derian Ave., #100, Irvine, CA 92614 (949) 281-1022 FAX (949) 280-3297  
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (809) 370-4667 FAX (909) 370-1046  
4825 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 428-1264

440-6894

Page 1 of

**Note:** By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

43°C / 56°C

## Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-6894-1

Login Number: 6894

List Source: TestAmerica Irvine

List Number: 1

Creator: Robb, Kathleen

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

12

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-6992-1

TestAmerica Sample Delivery Group: 29404596

Client Project/Site: Chevron Brea/Birch Hills Site - Soils

For:

URS Corporation

2020 East First Street, Suite 400

Santa Ana, California 92705

Attn: Jerry Zimmerle

Authorized for release by:

4/10/2012 4:18:28 PM

Sushmitha Reddy

Project Manager I

sushmitha.reddy@testamericainc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

## Table of Contents

Cover Page .....	1
Table of Contents .....	2
Sample Summary .....	3
Case Narrative .....	4
Client Sample Results .....	5
Chronicle .....	7
QC Sample Results .....	8
QC Association .....	10
Definitions .....	11
Certification Summary .....	12
Chain of Custody .....	14
Receipt Checklists .....	15

## Sample Summary

Client: URS Corporation  
Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
SDG: 29404596

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-6992-1	EB-032912-1	Water	03/29/12 09:05	03/29/12 18:05
440-6992-2	EBWIPE-032912-1	Wipe	03/29/12 09:15	03/29/12 18:05
440-6992-3	EB-032912-2	Water	03/29/12 09:50	03/29/12 18:05
440-6992-4	EBWIPE-032912-2	Wipe	03/29/12 10:00	03/29/12 18:05
440-6992-5	BLANK	Wipe	03/29/12 15:56	03/29/12 18:05

## Case Narrative

Client: URS Corporation  
Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
SDG: 29404596

---

**Job ID:** 440-6992-1

**Laboratory:** TestAmerica Irvine

---

**Narrative**

**Job Narrative**  
440-6992-1

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**Subcontract non-Sister**

No analytical or quality issues were noted.

**Laboratory:** TestAmerica Nashville

---

**NELAC Certification**

NELAC certifications are not held for the following analytes included in this report:

<u>Method</u>	<u>Matrix</u>	<u>Analyte</u>
SW846 8082	Wipe	PCB-1262
		PCB-1268

# Client Sample Results

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
 SDG: 29404596

**Client Sample ID: EB-032912-1**

**Lab Sample ID: 440-6992-1**

Date Collected: 03/29/12 09:05

Matrix: Water

Date Received: 03/29/12 18:05

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
PCB-1221	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
PCB-1232	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
PCB-1242	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
PCB-1248	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
PCB-1254	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
PCB-1260	ND		0.476		ug/L		03/31/12 12:45	04/03/12 04:44	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	86			17 - 142			03/31/12 12:45	04/03/12 04:44	1.00
Decachlorobiphenyl	71			10 - 149			03/31/12 12:45	04/03/12 04:44	1.00

**Client Sample ID: EBWIPE-032912-1**

**Lab Sample ID: 440-6992-2**

Date Collected: 03/29/12 09:15

Matrix: Wipe

Date Received: 03/29/12 18:05

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:40	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	86			19 - 147			03/31/12 09:15	04/02/12 00:40	1.00
Decachlorobiphenyl	96			20 - 150			03/31/12 09:15	04/02/12 00:40	1.00

**Client Sample ID: EB-032912-2**

**Lab Sample ID: 440-6992-3**

Date Collected: 03/29/12 09:50

Matrix: Water

Date Received: 03/29/12 18:05

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
PCB-1221	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
PCB-1232	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
PCB-1242	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
PCB-1248	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
PCB-1254	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
PCB-1260	ND		0.476		ug/L		03/31/12 12:45	04/03/12 05:06	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	93			17 - 142			03/31/12 12:45	04/03/12 05:06	1.00
Decachlorobiphenyl	59			10 - 149			03/31/12 12:45	04/03/12 05:06	1.00

## Client Sample Results

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
 SDG: 29404596

**Client Sample ID: EBWIPE-032912-2**

**Lab Sample ID: 440-6992-4**  
 Matrix: Wipe

Date Collected: 03/29/12 10:00

Date Received: 03/29/12 18:05

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 00:59	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	92		19 - 147				03/31/12 09:15	04/02/12 00:59	1.00
Decachlorobiphenyl	94		20 - 150				03/31/12 09:15	04/02/12 00:59	1.00

**Client Sample ID: BLANK**

**Lab Sample ID: 440-6992-5**

Date Collected: 03/29/12 15:56

Date Received: 03/29/12 18:05

**Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1254	0.670		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1262	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
PCB-1268	ND		0.500		ug/Wipe		03/31/12 09:15	04/02/12 01:17	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-meta-xylene	92		19 - 147				03/31/12 09:15	04/02/12 01:17	1.00
Decachlorobiphenyl	114		20 - 150				03/31/12 09:15	04/02/12 01:17	1.00

## Lab Chronicle

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
 SDG: 29404596

**Client Sample ID: EB-032912-1**

Date Collected: 03/29/12 09:05

Date Received: 03/29/12 18:05

**Lab Sample ID: 440-6992-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Prep	EPA 3510C/3665A			0.952	1050 mL	5 mL	12C6745_P	03/31/12 12:45	MWT	TAL NSH
Total Analysis	SW846 8082			1.00			V005320	04/03/12 04:44	WAM	TAL NSH

**Client Sample ID: EBWIPE-032912-1**

Date Collected: 03/29/12 09:15

Date Received: 03/29/12 18:05

**Lab Sample ID: 440-6992-2**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Prep	EPA 3550B			1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total Analysis	SW846 8082			1.00			V005319	04/02/12 00:40	WAM	TAL NSH

**Client Sample ID: EB-032912-2**

Date Collected: 03/29/12 09:50

Date Received: 03/29/12 18:05

**Lab Sample ID: 440-6992-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Prep	EPA 3510C/3665A			0.952	1050 mL	5 mL	12C6745_P	03/31/12 12:45	MWT	TAL NSH
Total Analysis	SW846 8082			1.00			V005320	04/03/12 05:06	WAM	TAL NSH

**Client Sample ID: EBWIPE-032912-2**

Date Collected: 03/29/12 10:00

Date Received: 03/29/12 18:05

**Lab Sample ID: 440-6992-4**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Prep	EPA 3550B			1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total Analysis	SW846 8082			1.00			V005319	04/02/12 00:59	WAM	TAL NSH

**Client Sample ID: BLANK**

Date Collected: 03/29/12 15:56

Date Received: 03/29/12 18:05

**Lab Sample ID: 440-6992-5**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Prep	EPA 3550B			1.00	1 Wipe	10 mL	12C6743_P	03/31/12 09:15	MWT	TAL NSH
Total Analysis	SW846 8082			1.00			V005319	04/02/12 01:17	WAM	TAL NSH

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

# QC Sample Results

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
 SDG: 29404596

## Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082

Lab Sample ID: 12C6743-BLK1

Matrix: Wipe

Analysis Batch: V005319

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 12C6743\_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00
PCB-1221	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00
PCB-1232	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00
PCB-1242	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00
PCB-1248	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00
PCB-1254	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00
PCB-1260	ND		0.500		ug/Wipe		03/31/12 09:15	04/01/12 20:35	1.00

Surrogate	Blank	Blank	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-meta-xylene			84		19 - 147			1.00
Decachlorobiphenyl			94		20 - 150			1.00

Lab Sample ID: 12C6743-BS1

Matrix: Wipe

Analysis Batch: V005319

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 12C6743\_P

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits
	Added								
PCB-1254		5.00		5.67	MNR1	ug/Wipe		113	72 - 137

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-meta-xylene			90		19 - 147			1.00
Decachlorobiphenyl			96		20 - 150			1.00

Lab Sample ID: 12C6745-BLK1

Matrix: Water

Analysis Batch: V005320

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 12C6745\_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00
PCB-1221	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00
PCB-1232	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00
PCB-1242	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00
PCB-1248	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00
PCB-1254	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00
PCB-1260	ND		0.500		ug/L		03/31/12 10:45	04/02/12 22:37	1.00

Surrogate	Blank	Blank	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-meta-xylene			100		17 - 142			1.00
Decachlorobiphenyl			93		10 - 149			1.00

Lab Sample ID: 12C6745-BS1

Matrix: Water

Analysis Batch: V005320

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 12C6745\_P

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits
	Added								
PCB-1254		5.00		5.25	MNR1	ug/L		105	11 - 150

# QC Sample Results

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
 SDG: 29404596

## Method: SW846 8082 - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 12C6745-BS1

Matrix: Water

Analysis Batch: V005320

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 12C6745\_P

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
Tetrachloro-meta-xylene			100		17 - 142
Decachlorobiphenyl			85		10 - 149

Lab Sample ID: 12C6745-BSD1

Matrix: Water

Analysis Batch: V005320

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total  
 Prep Batch: 12C6745\_P

Analyte	Spike	LCS Dup	LCS Dup	%Rec.	RPD
	Added	Result	Qualifier	Unit	Limit
PCB-1254	5.00	5.22	MNR1	ug/L	104

Surrogate	LCS Dup	LCS Dup	%Recovery	Qualifier	Limits
Tetrachloro-meta-xylene			101		17 - 142
Decachlorobiphenyl			80		10 - 149

## QC Association Summary

Client: URS Corporation  
 Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
 SDG: 29404596

### Pesticides

**Analysis Batch: V005319**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6743-BLK1	Method Blank	Total	Wipe	SW846 8082	12C6743_P
12C6743-BS1	Lab Control Sample	Total	Wipe	SW846 8082	12C6743_P
440-6992-2	EBWIPE-032912-1	Total	Wipe	SW846 8082	12C6743_P
440-6992-4	EBWIPE-032912-2	Total	Wipe	SW846 8082	12C6743_P
440-6992-5	BLANK	Total	Wipe	SW846 8082	12C6743_P

**Analysis Batch: V005320**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6745-BLK1	Method Blank	Total	Water	SW846 8082	12C6745_P
12C6745-BS1	Lab Control Sample	Total	Water	SW846 8082	12C6745_P
12C6745-BSD1	Lab Control Sample Dup	Total	Water	SW846 8082	12C6745_P
440-6992-1	EB-032912-1	Total	Water	SW846 8082	12C6745_P
440-6992-3	EB-032912-2	Total	Water	SW846 8082	12C6745_P

**Prep Batch: 12C6743\_P**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6743-BLK1	Method Blank	Total	Wipe	EPA 3550B	
12C6743-BS1	Lab Control Sample	Total	Wipe	EPA 3550B	
440-6992-2	EBWIPE-032912-1	Total	Wipe	EPA 3550B	
440-6992-4	EBWIPE-032912-2	Total	Wipe	EPA 3550B	
440-6992-5	BLANK	Total	Wipe	EPA 3550B	

**Prep Batch: 12C6745\_P**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6745-BLK1	Method Blank	Total	Water	EPA 3510C/3665A	
12C6745-BS1	Lab Control Sample	Total	Water	EPA 3510C/3665A	
12C6745-BSD1	Lab Control Sample Dup	Total	Water	EPA 3510C/3665A	
440-6992-1	EB-032912-1	Total	Water	EPA 3510C/3665A	
440-6992-3	EB-032912-2	Total	Water	EPA 3510C/3665A	

## Definitions/Glossary

Client: URS Corporation  
Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1  
SDG: 29404596

### Qualifiers

#### Pesticides

Qualifier	Qualifier Description
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.

### Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Laboratory	Authority	Program	EPA Region	Certification ID
Arizona	Arizona	State Program	AZ0671	10256
California	California	LA City Sanitation Districts	9	1108CA
California	California	State Program	6	2706
Guam	Guam	State Program	6	Cert. No. 10.001r
Hawaii	Hawaii	State Program	6	N/A
New Mexico	New Mexico	State Program	6	CA015312007A
Nevada	Nevada	State Program	6	N/A
Northem Mariana Islands	Northem Mariana Islands	State Program	9	N/A
Oregon	Oregon	Federal	10	4005
USDA	USDA	Federal		393
A2LA	A2LA	ACIL	4	0453.07
Alabama	Alabama	ISO/IEC 17025	10	UST-087
Arizona (UST)	Arizona	State Program	9	AZ0473
Connecticut	Connecticut	State Program	1	PH-0220
Florida	Florida	NEELAC	4	E87358
Illinois	Illinois	NEELAC	5	200010
Iowa	Iowa	NEELAC	7	131
Kentucky	Kentucky	State Program	7	E-10229
Kansas	Kansas	NEELAC	7	2963
Louisiana	Louisiana	NEELAC	6	M-TN002
Massachusetts	Massachusetts	State Program	1	LA110014
Michigan	Michigan	State Program	4	90008
Minnesota	Minnesota	State Program	8	N/A
Mississippi	Mississippi	State Program	4	N/A
New Jersey	New Jersey	NEELAC	1	TN965
North Dakota	North Dakota	State Program	2	11342
Ohio VAP	Ohio VAP	State Program	8	387
Oklahoma	Oklahoma	State Program	5	R-146
Oregon	Oregon	NEELAC	6	9412
Pennsylvania	Pennsylvania	NEELAC	10	CL00033
Rhode Island	Rhode Island	State Program	1	68-00585
South Carolina	South Carolina	State Program	4	84009
Tennessee	Tennessee	State Program	4	S-148469
Texas	Texas	NEELAC	6	T104704077-09-TX
Utah	Utah	Federal	8	TAN
Virginia	Virginia	NEELAC Secondary AB	3	460152
Washington	Washington	State Program	3	00323
West Virginia DEP	West Virginia DEP	State Program	3	C789
Wisconsin	Wisconsin	State Program	5	219
				998020430

## Certification Summary

## Certification Summary

Client: URS Corporation

Project/Site: Chevron Brea/Birch Hills Site - Soils

TestAmerica Job ID: 440-6992-1

SDG: 29404596

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	Wyoming (UST)	A2LA	8	453.07

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.



## **CHAIN OF CUSTODY FORM**

17461 Derian Ave., #100, Irvine, CA 92614 (949) 281-1022 FAX (949) 280-3297  
1014 E. Coolcy Dr., Suite A, Cotton, CA 92324 (809) 370-4667 FAX (809) 370-1046  
4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303  
6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1284

440-4992

Page \_\_\_\_\_ of \_\_\_\_\_

Client Name/Address: URS 2020 E. 11th St., #400 Santa Ana, CA 92705			Project/PO Number: 29404596			Analysis Required										
Project Manager: Jordan Mandel/ Jerry Zimmerle Sampler: Matt Anonsen			Phone Number: 714-835-6886 Fax Number:													
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	PCBs:									Special Instructions
EB-032912-1	L	Amber	2	3/29/12	0905	—	X									
EBWIPE-032912-1	Solid	WIPE	1		0915	—	X									
EB-032912-2	L	Amber	2		0950	—	X									
EBWIPE-032912-2	Solid	WIPE	1		1000	—	X									
BLANK	Solid	WIPE	1		1556	—	X									
Relinquished By: <i>M. A.</i>	Date/Time: 3/29/12 1700		Received By: <i>Jill Harten</i>		Date/Time: 3/29/12 1700		Turnaround Time: (Check) same day _____ 24 hours _____ 48 hours _____		RUSH 72 hours _____ 5 days _____ normal _____							
Relinquished By: <i>Kate Herndon</i>	Date/Time: 3/29/12 1805		Received By: <i></i>		Date/Time: 3/29/12 1805											
Relinquished By: <i></i>	Date/Time: 3/29/12 1805		Received In Lab By: <i></i>		Date/Time: 3/29/12 1805		Sample Integrity: (Check) Intact _____ on ice _____									

**Note:** By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

## Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-6992-1  
SDG Number: 29404596

Login Number: 6992  
List Number: 1  
Creator: Robb, Kathleen

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

12